

## CLAIMS:

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1. A plasma picture screen with a front plate (1) comprising a glass plate (3) on which a dielectric layer (4) and a protective layer (5) are provided, a back plate (2), a number of gas-filled plasma cells arranged between said plates and separated by partitioning walls, and a plurality of electrodes (6, 7, 11) on the front plate (1) and the back plate (2) for generating corona discharges, characterized in that a UV light reflecting layer (8) is provided on the protective layer (5).

2. A plasma picture screen as claimed in claim 1, characterized in that the UV light reflecting layer (8) comprises oxides of the composition  $M_2O$ , such as  $Li_2O$ , or oxides of the composition  $MO$ , with M chosen from the group Mg, Ca, Sr, and Ba, or oxides of the composition  $M_2O_3$ , with M chosen from the group B, Al, Sc, Y, and La, or oxides of the composition  $MO_2$ , with M chosen from the group Si, Ge, Sn, Ti, Zr, and Hf, or oxides of the composition  $M'M''_2O_4$ , with M' chosen from the group Mg, Ca, Sr, and Ba, and M'' chosen from the group Al, Sc, Y, and La, or fluorides of the composition  $MF$ , with M chosen from the group Li, Na, K, Rb, Cs, and Ag, or fluorides of the composition  $MF_2$ , with M chosen from the group Mg, Ca, Sr, Ba, Sn, Cu, Zn, and Pb, or fluorides of the composition  $MF_3$ , with M chosen from the group La, Pr, Sm, Eu, Gd, Yb, and Lu, or fluorides of the composition  $M'M''F_3$ , with M' chosen from the group Li, Na, K, Rb, and Cs, and M'' chosen from the group Mg, Ca, Sr, and Ba, or phosphates of the composition  $M_3PO_4$ , with M chosen from the group Li, Na, K, Rb, and Cs, or phosphates of the composition  $M_3(PO_4)_2$ , with M chosen from the group Mg, Ca, Sr, and Ba, or phosphates of the composition  $MPO_4$ , with M chosen from the group Al, Sc, Y, La, Pr, Sm, Eu, Gd, Yb, and Lu, or phosphates of the composition  $M_3(PO_4)_4$ , with M chosen from the group Ti, Zr, and Hf, or metaphosphates with a chain length n of between 3 and 9 and the composition  $(M_xPO_3)_n$ , with  $x = 1$  if M is chosen from the group Li, Na, K, Rb, and Cs,  $x = \frac{1}{2}$  if M is chosen from the group Mg, Ca, Sr, Ba, Sn, Cu, Zn, and Pb,  $x = \frac{1}{3}$  if M is chosen from the group Al, Sc, Y, La, Pr, Sm, Eu, Gd, Yb, and Lu, and  $x = \frac{1}{4}$  if M is chosen from the group Ti, Hf, and Zr, or polyphosphates with a chain length n between  $10^1$  and  $10^6$  and the composition  $(M_xPO_3)_n$ , with  $x = 1$  if M is chosen from the group Li, Na, K, Rb, and Cs,  $x = \frac{1}{2}$  if M is chosen from the group Mg, Ca, Sr, Ba, Sn, Cu,

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Zn, and Pb,  $x = 1/3$  if M is chosen from the group Al, Sc, Y, La, Pr, Sm, Eu, Gd, Yb, and Lu, and  $x = 1/4$  if M is chosen from the group Ti, Hf, and Zr, or primary phosphates of the composition  $MH_2PO_4$ , with M chosen from the group Li, Na, K, Rb, and Cs, or  $NH_4H_2PO_4$ , or diamond.

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3. A plasma picture screen as claimed in claim 1, characterized in that the UV light reflecting layer (8) comprises particles with a particle diameter of between 200 nm and 500 nm.

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4. A plasma picture screen as claimed in claim 3, characterized in that the UV light reflecting layer (8) has a thickness of 0.5  $\mu m$  to 5  $\mu m$ .

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5. A plasma picture screen as claimed in claim 1, characterized in that the UV light reflecting layer (8) comprises agglomerates of particles having particle diameters of between 10 nm and 200 nm.

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6. A plasma picture screen as claimed in claim 5, characterized in that the UV light reflecting layer (8) has a thickness of 0.2  $\mu m$  to 10  $\mu m$ .

7. A plasma picture screen as claimed in claim 1, characterized in that the UV light reflecting layer (8) covers the protective layer (5) completely or only partly.

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